

irrelevant and unreliable, in line with recent case law around the country that have considered and rejected the opinion, including recent orders in this District and in the Seventh Circuit Court of Appeals. *See Haskins v. 3M Co.*, No. 2:15-cv-02086, 2017 U.S. Dist. LEXIS 113657 (D.S.C. July 21, 2017) (Norton, J.); *Krik v. Exxon Mobil Corp.*, 870 F.3d 669 (7th Cir. 2017).

INTRODUCTION

In this asbestos personal injury lawsuit, Plaintiffs allege that Mr. Frank Huff, Jr. (“Mr. Huff”) contracted mesothelioma as the result of his exposure to various asbestos-containing materials, primarily while working as a welder for the United States Navy at the Charleston Naval Shipyard in North Charleston, South Carolina. With regard to Buffalo specifically, Plaintiffs assert that pumps manufactured and sold by Buffalo utilized asbestos-containing components (e.g., gaskets and packing in or associated with pumps), which Mr. Huff may have allegedly come into contact with as a bystander working nearby those pumps during his career, purportedly causing his disease.² As set forth herein, however, Plaintiffs’ experts in this case have not offered and cannot offer credible scientific testimony that Mr. Huff’s work around Buffalo pumps specifically caused Mr. Huff’s disease. Instead, these experts attempt to rely on causation theories that have been repeatedly rejected and excluded by courts across the country, including by this Court just last year.

This Motion is based on two grounds. First, none of Plaintiffs’ experts have offered specific causation testimony against Buffalo in their expert reports as they are required to do under Rule 26(a)(2). Second, any attempt by Plaintiffs’ experts to offer specific causation testimony

138817, at *11 (E.D. La. Oct. 5, 2016) (“The Court sees no material difference between the ‘every exposure’ theory and the ‘every significant exposure’ theory.”) (citing *Vedros*).

² For a more detailed description of the underlying exposure allegations, and the relevant facts and testimony in this case pertinent to Buffalo, see this Defendant’s Motion for Summary Judgment and supporting Memorandum, both of which are being filed concurrently herewith.

with respect to Buffalo through the every-exposure opinion, should be excluded from trial under: (a) F.R.E. 403, because it has no probative value and there is a high risk of confusing and misleading the jury; and (b) F.R.E. 702, because the opinion will not be not helpful to the jury, and it does not meet the standards set forth in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993).

This opinion, which is frequently attempted by experts in asbestos litigation, has been excluded by courts across the country for numerous reasons. *See, e.g., Haskins*, 2017 U.S. Dist. LEXIS 113657, at *14-22 (excluding the opinion under Rule 403, because it was directly at odds with the applicable causation standards under both South Carolina and Maritime law); *id.* at *28-29 n.13 (noting that the Court would also have excluded the opinion under Rule 702); *Krik*, 870 F.3d at 672-78 (affirming district court’s rejection of the “cumulative exposure” theory in a lung cancer case); *McIndoe v. Huntington Ingalls Inc.*, 817 F.3d 1170, 1177 (9th Cir. 2016) (affirming the district court’s rejection of the “each and every exposure” theory of causation because it “would render the substantial-factor test essentially meaningless”) (citing *Lindstrom v. A-C Prod. Liab. Trust*, 424 F.3d 488, 493 (6th Cir. 2005)); *Yates v. Ford Motor Co.*, 113 F. Supp. 3d 841, 846 (D.N.C. June 28, 2015) (“[A]pplying the *Daubert* factors, courts have found that the theory cannot be tested, has not been published in peer-reviewed works, and has no known error rate.”) (citing cases); *id.* (“Numerous courts have excluded expert testimony or evidence grounded in this theory, reasoning that it lacks sufficient support in facts and data.”) (citing cases); *Vedros v. Northrop Grumman Shipbuilding, Inc.*, No. 11-1198, 2015 U.S. Dist. LEXIS 106066, at *18 (E.D. La. Aug. 4, 2015) (same); *Bell v. Foster Wheeler Energy, Corp.*, No. 11-1198, 2016 U.S. Dist. LEXIS 138817, at *9-10 (E.D. La. Oct. 5, 2016) (“By now, the deficiencies of the ‘each and every exposure’ theory of causation in asbestos exposure cases have been extensively discussed and will

not be repeated here. . . . Suffice it to say, the Court continues to be of the view that the each and every exposure theory is not an acceptable approach for a causation expert to take because it is nothing more than the ipse dixit of the expert.”) (citations omitted); *Rockman v. Union Carbide Corp.*, No.: RDB-16-1169, 266 F. Supp. 3d 839, 843 (D. Md. 2017) (excluding specific causation opinion testimony of plaintiffs’ experts, as well as any other testimony that was generally “based on their underlying theory that ‘each and every’ exposure to asbestos ‘cumulates’ and should therefore be considered a cause of injury, regardless of the type of mesothelioma, the exposure ‘dose,’ or the type of asbestos”).³

As detailed herein, this Motion is not based solely on a *Daubert* challenge. Instead, Buffalo also submits that the every-exposure opinion offered by Plaintiffs’ experts, whether or not scientifically sound, should be excluded because it is not legally sufficient to establish causation, regardless of the law that applies to this matter. *See, e.g., Lindstrom v. A-C Prod. Liab. Trust*, 424 F.3d 488, 492 (6th Cir. 2005) (holding, under maritime law, that to establish causation, a plaintiff must show that (1) he was exposed to a defendant’s product, and (2) the product was a substantial factor in causing the injury suffered); *Henderson v. Allied Signal, Inc.*, 373 S.C. 179, 185, 644 S.E.2d 724, 727 (2007) (“To support a reasonable inference of substantial causation from

³ This theory is typically offered by plaintiffs’ experts to fulfill their burden of proving specific causation. *See, e.g., Fisher v. Pelstring*, 817 F. Supp. 2d 791, 814 (D.S.C. 2011); *Zellers v. NexTech Northeast, LLC*, 533 Fed. Appx. 192, 196 n.6 (4th Cir. 2013) (“In toxic tort cases, in order to carry the burden of proving a plaintiff’s injury was caused by exposure to a specified substance, the plaintiff must demonstrate the levels of exposure that are hazardous to human beings generally as well as plaintiff’s actual level of exposure. . . . These two levels of causation are known as ‘general causation’ and ‘specific causation.’”) (internal quotations and citations omitted). Because Plaintiffs here cannot meet that burden, as set forth more fully herein, Buffalo is also moving for summary judgment based, in part, on this Motion. *See Haskins*, No. 2:15-cv-02086, ECF No. 224, *Order granting Motion for Summary Judgment and denying Motion for Reconsideration*, attached as Exhibit A (granting summary judgment in favor of Buffalo because Plaintiffs could not offer specific causation testimony after the every-exposure opinion was excluded).

circumstantial evidence, there must be evidence of exposure to a specific product on a regular basis over some extended period of time in proximity to where the plaintiff actually worked.”) (internal quotations and citations omitted).⁴ Indeed, the every-exposure opinion has been rejected under maritime law at the appellate level because it undermines the applicable causation standards. *See Lindstrom*, 424 F.3d at 493 (holding that the every-exposure opinion is insufficient as a matter of law to make a causation finding as to any particular defendant). Only if Plaintiffs can show that the opinion is legally sufficient should the Court analyze this opinion under *Daubert* and follow the growing weight of federal authorities excluding the opinion.

RELEVANT FACTS

Plaintiffs have named two experts who will apparently offer expert opinions in this area: (1) Dr. Arnold Brody, Ph.D., a molecular biologist, and (2) Dr. Jerrold L. Abraham, M.D., a pathologist who specializes in environmental and occupational medicine. Both experts touch on issues of causation, and their attempted causation opinions are thus the subject of this Motion.

Buffalo is informed and believes that these experts may attempt to offer specific causation opinions. As detailed below, however, they have not been tendered to offer such opinions as to Buffalo and are thus prohibited from offering those opinions under Rules 26(a)(2) and 37(c)(1) of the Federal Rules of Civil Procedure. Plaintiffs may also try to have these experts offer the every-

⁴ To the extent this Court determines that there is a conflict between maritime law and South Carolina law, Buffalo respectfully submits that the Court should apply maritime law. *See, e.g., Conner v. Alfa Laval, Inc.*, 799 F. Supp. 2d 455, 466 (E.D. Pa. 2011) (Robreno, J.) (holding that “maritime law govern[s] those claims involving plaintiffs who were sea-based Navy workers so long as the allegedly defective product was produced for use on a vessel,” while state law governs claims “[w]here the asbestos claims asserted stem from predominantly land-based Navy work”); *see also Dandridge v. Crane Co.*, No. 2:12-cv-00484, 2016 U.S. Dist. LEXIS 9378, at *5 (Jan. 27, 2016) (Norton, J.) (noting, where all of the alleged exposure occurred on a sea-based Navy ship, that “the parties agree that this case falls within the court’s admiralty jurisdiction; therefore, maritime law applies”). That issue is addressed more fully in Buffalo’s supporting memorandum accompanying its Motion for Summary Judgment.

exposure opinion, in varying ways, to meet their specific causation burden of proof in this toxic tort case, by essentially arguing that *all* exposures to asbestos contributed to cause Mr. Huff's disease. In fact, Plaintiffs' experts appear to do just that in their reports.

For example, Dr. Brody expressed this opinion in his report,⁵ stating: "Once a person develops an asbestos-related cancer, it is not possible to exclude any of the person's above-background exposures to asbestos from the causal chain. *Each exposure to asbestos that an individual with mesothelioma experienced in excess of a background level contributes to the development of the disease.*"⁶ Dr. Brody also argues the inverse of this statement with respect to causation, asserting that "there is no safe level of exposure to asbestos."⁷ Brody offers these opinions despite also admitting that mesothelioma is a dose-response disease, "in that the more asbestos a person is exposed to, the more likely that person is to develop" mesothelioma.⁸ Notably, similar language was recently excluded in a North Carolina case where Dr. Brody was offered as an expert. *See Yates*, 113 F. Supp. 3d at 846-48.

Dr. Abraham also expressed this opinion in his report,⁹ stating:

I conclude to a reasonable degree of medical certainty that Mr. Huff's mesothelioma was caused by his occupational exposures to asbestos. I further conclude that all forms of asbestos to which Mr. Huff was exposed were substantial contributing factors in the development of his disease. I further conclude that *all of Mr. Huff's exposures to asbestos from all types and brands of products to which he had occupational exposures were substantial contributing factors in the development of his disease.*¹⁰

⁵ See Report of Arnold R. Brody, Ph.D., attached as Exhibit B.

⁶ See *id.* at 23-24 (emphasis added).

⁷ See *id.* at 24.

⁸ *Id.* at 23.

⁹ See Report of Jerrold L. Abraham, M.D., dated December 14, 2016, attached as Exhibit C.

¹⁰ See *id.* at 5 (emphasis added).

Dr. Abraham cleverly, and perhaps in anticipation of the present Motion, adds a caveat in his report that appears to be litigation-based:

In expressing this opinion, I am not opining, nor do I believe, that -- taken out of context and in isolation -- exposure to a single fiber of asbestos or one breath is a substantial cause of mesothelioma or other asbestos related diseases. Rather, it is my opinion that *every exposure to asbestos experienced by a worker contributes to cause mesothelioma in workers who are unfortunate and develop this terminal disease.*¹¹

Nonetheless, despite his efforts to couch his causation opinion differently, it is clear that Dr. Abraham is offering the every-exposure opinion. Indeed, Dr. Abraham concludes his report by reiterating that “there is no safe level of asbestos exposure with respect to the development of mesothelioma in humans.”¹²

As set forth more fully herein, Buffalo respectfully requests that the Court exclude any testimony of these experts related to the every-exposure opinion. This opinion, which has been excluded by numerous courts across the country over the past decade, must be excluded here because (1) it conflicts with well-settled causation standards in asbestos litigation and would thus be confusing or misleading to the jury and would have no probative value whatsoever, and (2) it is not reliable under Rule 702 and *Daubert*.

STANDARD OF REVIEW

This Court has carefully laid out the analysis for a Motion like the one at bar in recent years as follows:

Federal Rule of Evidence 702 provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

(a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;

¹¹ *Id.*

¹² *See id.* at 6.

- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

District courts serve as gatekeepers for expert testimony. The [C]ourt has a “special obligation” to ensure that expert testimony is relevant and reliable. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 147, 119 S. Ct. 1167, 143 L. Ed. 2d 238 (1999).

Under *Daubert*, the [C]ourt must address two questions: first, whether the expert’s testimony is based on “scientific knowledge”; and second, whether the testimony “will assist the trier of fact to understand or determine a fact in issue.” 509 U.S. at 592. The first question is answered by assessing “whether the reasoning or methodology underlying the testimony is scientifically valid.” *Id.* at 592-93. Several nondispositive factors should be considered in determining the reliability of a particular scientific theory or technique: whether it (1) can be and has been tested; (2) has been subjected to peer review and publication; (3) has a known or potential rate of error; and (4) has attained general acceptance in the pertinent scientific community. *See id.* at 593-94. In considering these factors, the focus “must be solely on principles and methodology, not on the conclusions that they generate.” *Id.* at 595. The factors are not exclusive; what factors are relevant to the analysis “depends upon the particular circumstances of the particular case at issue.” *Kumho Tire*, 526 U.S. at 150.

The second inquiry “goes primarily to relevance.” *Daubert*, 509 U.S. at 591. Relevance is determined by ascertaining whether the testimony is sufficiently tied to the facts of the case such that it will aid the jury in resolving a factual dispute. *Id.* at 593.

United States v. Eady, No. 2:12-cr-00415, 2013 U.S. Dist. LEXIS 124266, 5-7 (D.S.C. Aug. 30, 2013) (Norton, J.).

ARGUMENT

I. Plaintiffs’ Experts Have Not Offered Specific Causation Opinions in This Case.

In their reports, Drs. Brody and Abraham fail to make any specific reference to Buffalo or its products.¹³ They are thus prohibited from testifying that any Buffalo products specifically

¹³ See generally Brody Report, at Ex. B and Abraham Report, at Ex. C.

caused Mr. Huff's mesothelioma. *See* Fed. R. Civ. P. 26(a)(2), (requiring testifying experts to provide written reports containing, *inter alia*, "a complete statement of all opinions the witness will express and the basis and reasons for them"); *see also* Fed. R. Civ. P. 37(c)(1) ("If a party fails to provide information or identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that information or witness to supply evidence on a Motion, at a hearing, or at a trial, unless the failure was substantially justified or is harmless.").¹⁴

Based on the fact that *neither* of Plaintiffs' causation experts have articulated any defendant-specific causation opinions, and given Plaintiffs' experts' own admissions that mesothelioma is a dose-response disease that is only caused from high amounts of exposure, those experts cannot offer specific causation opinions with regard to Buffalo. *See, e.g., Yates*, 113 F. Supp. 3d at 850 ("To prove that a given injury was 'caused by exposure to a specified substance,' [specifically including asbestos] a plaintiff must demonstrate 'the levels of exposure that are hazardous to human beings generally' and 'the plaintiff's actual level of exposure'" (quoting *Westberry v. Gislaved Gummi AB*, 178 F. 3d 257, 263 (4th Cir. 1999)); *see also Zellers v. Nextech Northeast, LLC*, 533 F. App'x 192, 198 (4th Cir. 2013) (affirming exclusion of expert for failure to demonstrate plaintiff's actual level of exposure); *cf. Hearn v. Snapka*, No. 13-11-00332, 2012 Tex. App. LEXIS 10788, at *20 (Tex. Ct. App. Dec. 28, 2012) (excluding Dr. Bedrossian's every-exposure opinion for multiple reasons, including because "[a]lthough Bedrossian states that exposure to asbestos was necessarily a significant contributing factor to the development of

¹⁴ The exclusion of evidence under Rule 37(c)(1) for failure to make a disclosure required by Rule 26(a) is "self-executing" and "automatic" unless the failure to disclose is substantially justified or harmless. Fed. R. Civ. P. 37(c)(1); 1993 Amendments to Advisory Committee Notes to Fed. R. Civ. P. 37(c); *Campbell v. United States*, 470 Fed. Appx. 153, 156 (4th Cir. 2012).

appellant's WDPM, he does not connect appellant's WDPM to any specific defendant or any specific asbestos-containing product.”).

II. Any Attempt By Plaintiffs To Offer Specific Causation Opinions as to Buffalo Through the Every-Exposure Opinion Is Improper.

Because Plaintiffs' experts are not offering specific causation testimony as to Buffalo products by conducting an analysis of the exposures and/or doses of asbestos that Mr. Huff allegedly received in association with those products, Plaintiffs are left with the every-exposure opinion to meet their specific causation burden.¹⁵ As noted below, however, that opinion is inadmissible and must be excluded, for several reasons.

A. The Every-Exposure Opinion Should Be Excluded Under F.R.E. 403 Because it Has No Probative Value, and it Would Serve Only to Confuse and Mislead the Jury Regarding Causation Standards.

It is well-established that under maritime law Plaintiffs must demonstrate substantial-factor causation before any defendant can be held legally responsible for their injuries. *See, e.g., Lindstrom*, 424 F.3d at 492 (holding that, under maritime law, plaintiff must show “that (1) he was exposed to defendant's product, and (2) the product was a substantial factor in causing the injury suffered.”). South Carolina law carries at least as high a causation burden, generally requiring evidence of “exposure to a specific product on a regular basis over some extended period of time in proximity to where the plaintiff actually worked” -- referred to as the “frequency, regularity, and proximity test.” *Henderson*, 373 S.C. at 185, 644 S.E.2d at 727. Further, the exposure must

¹⁵ Plaintiffs may argue in response to this Motion that they will elicit specific causation opinion testimony from Drs. Brody or Abraham through the use of hypothetical questions. In addition to being outside the scope of their reports, the use of such hypothetical questions will merely serve as an attempt to mask the every-exposure opinion, and it should be excluded for the same reasons as those articulated herein.

be to friable, or airborne, asbestos. *Id.* (“Presence in the vicinity of static asbestos is not exposure to asbestos.”).¹⁶

As the Sixth Circuit Court of Appeals found in *Lindstrom*, the every-exposure opinion is insufficient as a matter of law to make a causation finding as to any particular defendant. *Lindstrom*, 424 F.3d at 493. The opinion is incompatible with the substantial-factor-causation test because it effectively collapses two distinct legal elements into one. *Id.* (stating that if the opinion “that every exposure to asbestos, however slight, was a substantial factor in causing . . . disease” were accepted, then “the Sixth Circuit’s ‘substantial factor’ test would be meaningless”);¹⁷ *see also Martin v. Cincinnati Gas & Elec. Co.*, 561 F.3d 439, 443 (6th Cir. 2009). In other words, the opinion is simply misleading, and it would serve only to confuse a jury about proper causation standards.

This is exactly the conclusion that this Court reached when it evaluated the every-exposure opinion just last year. *See Haskins*, 2017 U.S. Dist. LEXIS 113657. There the Court took issue with the plaintiff’s expert’s attempt to “equate causation with ‘contribution’ to the total cumulative level of exposure” and concluded that the expert’s causation opinion, strikingly similar to that presented by Plaintiffs’ experts here, “would render the substantial causation rule meaningless, as any level of exposure may cause mesothelioma.” *Id.* at *21-27; *see also id.* at *17 (“The trouble

¹⁶ Buffalo maintains that, in addition to the *Henderson* exposure burden, South Carolina law still also requires a plaintiff to meet the more traditional causation requirements of “causation in fact” or “but for” causation and “legal causation” by establishing foreseeability. *See, e.g., Small v. Pioneer Machinery, Inc.*, 329 S.C. 448, 494 S.E.2d 835 (Ct. App. 1997).

¹⁷ One of the lower court decisions affirmed in *Lindstrom* properly held that the every-exposure opinion is, at heart, a legal conclusion, and a court cannot permit its introduction and simultaneously discharge its duty to apply the law of a jurisdiction using a substantial-factor test for causation: “This is a strict liability standard, which the law does not impose upon manufacturers of products containing asbestos. This argument would completely obviate the ‘substantial factor’ and the ‘proximate cause’ standards, which Sixth Circuit law directs [the court] to apply.” *Bartel v. John Crane, Inc.*, 316 F. Supp. 2d 603, 605 (N.D. Ohio 2004).

with [the expert's] opinions is his application of these principles to conclude that, because [plaintiffs'] exposures to the defendants' asbestos containing products were—by definition—part of their respective “cumulative doses,” such exposures significantly contributed to their development of mesothelioma.”).

Similar to Drs. Abraham and Brody, the plaintiff's expert in *Haskins* never defined “what level of exposure he considers significant and openly admits that he did not even need to know [plaintiff's] actual level of exposure to defendants' products in order to render his opinions.” *Id.* at 18. This “leads to the bizarre conclusion that any exposure that carries any chance of causing mesothelioma—however miniscule—constitutes a ‘substantial cause,’ regardless of the other exposures that may have contributed to the total cumulative exposure.” *Id.* at *24. Because the expert's “opinions are premised on his conclusion,” the Court determined that “his opinions cannot be used to support a finding of substantial causation.” *Id.* at 27.

Similarly, the United States District Court for the District of Utah recently reviewed the every-exposure opinion offered by an expert in another asbestos-related personal-injury lawsuit, holding that even if it were admissible under F.R.E. 702 (the court ultimately excluded it on those grounds), “the court would exclude Dr. Hammar's testimony pursuant to Rule 403 of the Federal Rules of Evidence, because the probative value of such unsupported speculation by Dr. Hammar is substantially outweighed by the danger of unfair prejudice, as well as being confusing, and presenting a danger of misleading the jury.” *See Smith v. Ford Motor Co.*, No. 2:08-cv-630, 2013 U.S. Dist. LEXIS 7861, at *5 (D. Utah. Jan. 18, 2013).

As Judge Flanagan recently observed in the Eastern District of North Carolina while ruling on this precise issue (involving some of the same experts at issue here):

To prove that a given injury was “caused by exposure to a specified substance,” *a plaintiff must demonstrate “the levels of exposure that are hazardous to human*

beings generally,” and “the plaintiff’s actual level of exposure.” Westberry, 178 F.3d at 263 (quotations omitted). Moreover, *there must be a showing that the plaintiff’s level of exposure is comparable to the levels of exposure that are hazardous as a general matter.* See *id.*, (“[S]cientific knowledge of the harmful level of exposure to a chemical, plus knowledge that the plaintiff was exposed to such quantities, are minimal facts necessary to sustain the plaintiffs’ burden in a toxic tort case.”) (emphasis added) (quoting *Allen v. Pa. Eng’g Corp.*, 102 F.3d 194, 199 (5th Cir. 1996)); see also *Zellers v. NexTech Northeast, LLC*, 895 F. Supp. 2d 734, 742 (E.D. Va. 2012) (“‘Ruling in’ exposure to a particular substance as a possible cause of a patient’s medical condition requires (1) a reliable determination of the level of exposure necessary to cause the condition and (2) a reliable determination that the patient was exposed to the substance at this level.”).

The Fourth Circuit and other courts have *applied these principles not only to assess the sufficiency of the evidence supporting plaintiff’s case, but also to consider whether expert testimony on causation is reliable.* See Westberry, 178 F.3d at 263; *Zellers v. NexTech Northeast, LLC*, 533 F. App’x 192, 198 (4th Cir. 2013) (affirming exclusion of expert for failure to demonstrate plaintiff’s actual level of exposure); *Roche v. Lincoln Property Co.*, 278 F. Supp. 2d 744, 754 (E.D. Va. 2003) (excluding expert on finding that he “lack[ed] any knowledge of the levels of exposure to mold required to manifest any symptoms.”); *Cavallo v. Star Enterprise*, 892 F. Supp. 756, 772 (E.D. Va. 1995) (excluding opinion when expert “could cite no studies or published literature to support adverse effects *from that level* of exposure to [the specific toxic agent].”), *aff’d* in relevant part, 100 F.3d 1150 (4th Cir. 1996). Such standards consistent with a “central tenet” in the science of the harmful effects of chemical and physical agents on organisms — “the dose makes the poison,” i.e. “all chemical agents are intrinsically hazardous, whether they cause harm is only a question of dose.” Bernard D. Goldstein and Mary Sue Henifin, “Reference Guide on Toxicology,” in *Federal Reference Manual on Scientific Evidence*, 636 (3d ed. 2011).

Yates, 113 F. Supp. 3d 841, 850-51 (emphasis added) (footnotes omitted). Consistent with the principles articulated above, applicable law demonstrates that “casual” or “minimal” exposure to a defendant’s product, unproven to cause disease, is never sufficient to support a finding of causation against that defendant. See *Lindstrom*, 424 F.3d at 492; *Henderson*, 373 S.C. at 185, 644 S.E.2d at 727. Yet the every-exposure theory is inconsistent with that basic principle.

The every-exposure opinion has one purpose: to establish the legally required element of causation, as detailed above. But it is simply insufficient to do so under the governing law (and as a matter of science, as discussed more fully herein). The opinion improperly encourages a jury

not to engage in a critical assessment of the exposure and medical evidence to assess causation, as a jury must do. Instead, the opinion invites the jury to take a much easier route to a finding of causation: it encourages the jury to equate evidence of a *single exposure* with evidence of causation. This would be contrary to the governing legal standards, and it would prejudice Buffalo. Accordingly, the every-exposure opinion should be excluded under F.R.E. 403.

B. The Every-Exposure Opinion is Not Admissible Under F.R.E. 702 and The Standards Set Forth in *Daubert*.

The every-exposure opinion should also be excluded under F.R.E. 702 because it is not helpful to a jury and it does not satisfy the Supreme Court's test in *Daubert*. Another district court made both these findings recently, and that Court's analysis provides guidance here. *See Smith*, 2013 U.S. Dist. LEXIS 7861.

1. **The every-exposure opinion is not admissible because it does not even comply with the most basic principle of F.R.E. 702—it is not helpful to a jury.**

Plaintiffs' experts will opine that any asbestos fibers inhaled by Mr. Huff were capable of causing his disease because, Plaintiffs allege, there is no threshold of exposure below which there is no risk. These experts mistakenly conclude that because they cannot rule any particular exposure *out*, they can rule them all *in*. The *Smith* court aptly likens the every-exposure opinion to a similarly hasty conclusion in a hypothetical unsolved murder:

It is somewhat like a homicide detective who discovers a murdered man from a large family. Based on his and other detectives' training and experience the detective knows that family members are often the killer in such cases. When asked if there are any suspects the detective says he cannot rule out any of the murdered man's relatives. This would be reasonable, but it would not allow the detective to attribute legal liability to every family member on the basis of such a theory.

Smith, 2013 WL 214378 at *3, 2013 U.S. Dist. LEXIS 7861, at *7-8. In this lawsuit, the jury will be tasked with determining legal liability; the every-exposure opinion is not helpful in performing

that task. Thus, the opinion is inadmissible under the standards of F.R.E. 702. *Id.* 2013 U.S. Dist. LEXIS 7861, at *10, at (stating that the every-exposure opinion fails “with regard to the most basic purpose of Rule 702—that the expert’s opinion should be helpful to the jury”); *see also Yates*, 113 F. Supp. 3d at 856 (noting that the every-exposure opinion is “entirely circular and conclusory, and will not assist the jury”); *Haskins*, 2017 U.S. Dist. LEXIS 113657, at *28, n.13 (noting that in addition to its exclusion of this opinion under Rule 403, the court also likely would have excluded it under Rule 702 because “it would likely fail to assist the jury on the issue of specific causation” and, under *Daubert*, ““Rule 702’s helpfulness standard requires a valid scientific connection to the pertinent inquiry as a precondition to admissibility”) (quoting *Daubert*).

2. The every-exposure opinion fails under *Daubert*.

In *Daubert*, the Court held that a “trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable.” *Id.* In order for an expert opinion to be reliable, the opinion must be “based on the ‘methods and procedures of science’ rather than on ‘subjective belief or unsupported speculation.’” *In re Paoli Railroad Yard Litigation*, 35 F.3d 717, 742 (3d Cir. 1994) (quoting *Daubert*, 509 U.S. at 589-90); *see also Zellers v. NexTech Northeast, LLC*, 533 Fed. Appx. 192, 197 (4th Cir. 2013) (“While it is true that there is no prohibition on utilizing multiple experts to establish various components of a party’s case, this does not change *Daubert*’s command that an expert’s testimony must be based on ‘more than subjective belief or unsupported speculation’”) (quoting *Daubert*). The proposed testimony must be based on “good grounds and appropriate validation must support it.” *Daubert*, 509 U.S. at 590. Importantly, the Court must evaluate the testimony with the understanding that “[t]he burden for establishing qualification, reliability, and helpfulness rests on the proponent of the expert opinion.

. . .” *U.S. v. Frazier*, 387 F.3d 1244, 1260 (11th Cir. 2004). Here, Plaintiffs cannot meet this burden.

Again the *Smith* Court is helpful to the analysis. Like Drs. Abraham and Brody here, the expert witness in *Smith* opined that the plaintiff’s disease “was caused by his total and cumulative exposure to asbestos, with all exposures and all products playing a contributing factor.” *Smith*, 2013 U.S. Dist. LEXIS 7861, at *7. As the *Smith* court noted, however, that opinion is based on a complete “lack of facts and data,” and is supported by no scientific methodology. *Id.*, 2013 U.S. Dist. LEXIS 7861, at *6-7. Ultimately, the *Smith* court held that to offer a methodologically sound opinion on causation, an expert witness must show that the alleged exposure to the specific defendant’s product “constitutes proof of sufficient exposure to cause [the plaintiff’s] cancer on its own . . . or that such exposure amounted to more than an insignificant or de minimus factor in the development of the [plaintiff’s] disease.” *Id.*, 2013 U.S. Dist. LEXIS 7861, at *9. Like in *Smith*, here, Plaintiffs’ experts offer no such analysis. Their proposed every-exposure opinions are inadmissible under *Daubert*. *See id.*; *see also Anderson v. Ford Motor Co.*, 950 F. Supp. 2d 1217, 1225 (D. Utah 2013) (holding that the “every exposure theory of causation does not meet the standards set by F.R.E. 702 and *Daubert* and must be excluded”); *Krik*, 76 F. Supp. 3d at 753 (“[T]he Court concludes that the ‘Any Exposure’ theory also is inadmissible given Krik’s experts’ wholesale failure to base their opinions on facts specific to this case.”). As one court aptly explained:

The Court agrees with [Defendant] that Dr. Hammar’s proposed specific causation opinions in this case are unreliable and inadmissible, essentially for the reasons articulated by the thoughtful opinions in *Smith*, *Anderson*, *Davidson*, and *Krik*. ***Although there may be no known safe level of asbestos exposure, this does not support Dr. Hammar’s leap to the conclusion that therefore every exposure [Plaintiff] had to asbestos must have been a substantial contributing cause of his mesothelioma.*** The Court agrees that this “is not an acceptable approach for a causation expert to take.” *Krik*, 2014 U.S. Dist. LEXIS 175983, 2014 WL 7330901,

at *4, and it is “precisely the kind of testimony the Supreme Court in *General Electric Co. v. Joiner* . . . observed as being nothing more than the ‘ipse dixit of the expert.’” *Smith*, 2013 U.S. Dist. LEXIS 7861, 2013 WL 214378, at *2 (quoting 522 U.S. 136, 146, 118 S. Ct. 512, 139 L. Ed. 2d 508 (1997)). ***This kind of blanket specific causation opinion is not based on or tied to the specific facts and circumstances of any of [Plaintiff’s] exposures to asbestos and it elides any differences or nuances of duration, concentration, exposure, and the properties of the fibers to which he may have been exposed.*** The Court is not persuaded that such a one-size-fits-all approach is reliable expert testimony.

Comardelle v. Pa. Gen. Ins. Co., 76 F. Supp. 3d 628, 634 (E.D. La. 2015) (emphasis added).

It is well-established that in order to recover in a toxic tort case, a plaintiff must prove the *minimum* dose necessary to cause the injury alleged, as well as the plaintiff’s actual level of exposure to the toxic substance. *See Westberry*, 178 F.3d at 263; *Yates*, 113 F. Supp. 3d 841, 850-51; *see also McClain v. Metabolife Int’l, Inc.*, 401 F.3d 1233, 1241 (11th Cir. 2005) (citing *Mitchell v. Gencorp*, 165 F.3d 778, 781 (10th Cir. 1999)). Thus, when analyzing an expert’s methodology in an asbestos case, “the [C]ourt should pay careful attention to the expert’s testimony about the dose-response relationship.” *See McClain*, 401 F.3d at 1241 (citing *Mitchell*). The dose-response relationship provides invaluable information regarding the minimum degree of exposure necessary to cause the alleged injury. *Id.* “The expert who avoids or neglects this principle . . . casts suspicion on the reliability of his methodology.” *Id.*

The every-exposure opinion ignores the dose-response relationship. “Simply put, one cannot simultaneously maintain that a single fiber among millions is substantially causative, while also conceding that a disease is dose responsive.” *Betz*, 615 Pa. at 550, 44 A.3d at 56. As the *Smith* court recognized, “[n]umerous courts have examined and rejected expert testimony attempting to assert causation without assessing the dose and held the every exposure theory

lacking under *Daubert* and Rule 702.”¹⁸ 2013 U.S. Dist. LEXIS 7861, at *12-13 (citing, *inter alia*, *Moeller v. Garlock Sealing Technologies, LLC*, 660 F.3d 950, 952 (6th Cir. 2011); *Borg-Warner Corp. v. Stephens*, 239 S.W.3d 304, 321 (Tex. App. Ct. 2010) (further citations omitted)).¹⁹ The every-exposure opinion was also recently rejected by the United States District Court for the District of Columbia, which held that the opinion that there is “no safe level” of asbestos exposure addresses only *risk*, and does not even address *causation*, much less prove it. *See Wannall v. Honeywell Int’l, Inc.*, 292 F.R.D. 26, 41-42 (D.D.C. 2013).

The scientific method requires “the generation of testable hypotheses that are then subjected to the real world crucible of experimentation, falsification/validation, and replication.” *Perry v. Novartis Pharm. Corp.*, 564 F. Supp. 2d 452, 459 (E.D. Pa. 2008) (quoting *Caraker v. Sandoz Pharm. Corp.*, 188 F. Supp. 2d 1026, 1030 (S.D. Ill. 2001)). As numerous courts have

¹⁸ Other courts have excluded expert testimony that offered inadequate support for the every-exposure opinion in similar factual contexts. *See, e.g., McClain*, 401 F.3d at 1243 (excluding expert testimony that any dose of Metabolife could result in serious medical complications because the expert merely stated that “any amount of Metabolife is too much, which clearly contradicts the principles of reliable methodology”); *Moore v. Ashland Chem. Inc.*, 151 F.3d 269, 278 (5th Cir. 1998) (excluding expert testimony that “offered no scientific support for [the] general theory that exposure to Toluene solution at any level would cause RADS”). This refusal to admit the every-exposure opinion in several different toxic tort cases is indicative of the dubious value courts place on the unsupported assertion of the opinion. Asbestos cases are no different.

¹⁹ Courts have repeatedly taken a highly skeptical view of the science underlying the every-exposure opinion. *See, e.g., Georgia-Pacific Corp. v. Stephens*, 239 S.W.3d 304, 320–21 (Tex. App. 2007) (“The [plaintiffs’] experts failed to show, however, that the ‘any exposure’ theory is generally accepted in the scientific community—that *any* exposure to a product that contains asbestos results in a statistically significant increase in the risk of developing mesothelioma.”) (emphasis in original); *In re W.R. Grace & Co.*, 355 B.R. 462, 476 (Bankr. D. Del. 2006) (“The use of the no safe level or linear ‘no threshold’ model for showing unreasonable risk ‘flies in the face of the toxicological law of dose-response, that is, that ‘the dose makes the poison. . . .’”); *Bartel v. John Crane, Inc.*, 316 F. Supp. 2d 603, 611 (N.D. Ohio 2004) (“[T]he opinion of Dr. Frank, that every breath [plaintiff] took which contained asbestos could have been a substantial factor in causing his disease, is not supported by the medical literature.”); *Gregg v. V-J Auto Parts, Co.*, 596 Pa. 274, 292, 943 A.2d 216, 227 (Pa. 2007) (labeling the every-exposure opinion a “fiction” and holding that it cannot properly “support the conclusion that the product sold by the defendant was a substantial factor in causing the harm.”).

recognized, the every-exposure opinion simply has not progressed through these steps. *See, e.g., Yates*, 113 F. Supp. 3d at 846 (excluding the theory because “the complainants have not shown that expert testimony and evidence espousing this theory has the sufficient support of facts or data, nor have they shown that it is testable, published in peer-reviewed works, or has any error rate”).

C. Recent Authority Recognizes the Questionable Nature of the Every Exposure Opinion and the Need for a *Daubert* Hearing.

A common argument that plaintiffs often make in response to this issue is that, not only is the every-exposure opinion admissible under *Daubert*, but it is also not necessary for the Court to hold a *Daubert* hearing to address the admissibility of that evidence. Recent authority, however, demonstrates that the every-exposure opinion is specifically the type of testimony that must be subject to a *Daubert* hearing so the Court can fully evaluate the reliability and scientific validity of the proposed testimony. *See Barabin v. AstenJohnson, Inc.*, 740 F.3d 457, 467 (9th Cir. 2014).

In *Barabin*, the United States Court of Appeals for the Ninth Circuit sitting *en banc* reversed a trial court decision admitting the testimony of a Plaintiff’s expert in an asbestos case, Dr. Carl Brodtkin. There, Dr. Brodtkin’s opinions included the every-exposure opinion here at issue. *Id.* at 462. At trial, the *Barabin* defendants moved to exclude the every-exposure opinion testimony offered by Plaintiffs’ experts and, without a *Daubert* hearing, the trial court found the competing theories of causation should be left for the jury to evaluate. *Id.* The Ninth Circuit, however, reversed, concluding that the district court abused its discretion by abdicating its role as the gatekeeper of scientific evidence and not evaluating the every-exposure opinion testimony under *Daubert*. *Id.* at 467. In line with the *Barabin* opinion, Buffalo would invite the Court, in its discretion, to hold a *Daubert* hearing with respect to this issue, as it did in the *Haskins* case, so that the Court may hear in greater detail the problems with the every-exposure opinion under Rule 403, Rule 702, and *Daubert*.

CONCLUSION

For all of the above reasons, Buffalo respectfully requests that the Court exclude any opinion testimony from Plaintiffs' experts on the issue of specific causation as to Buffalo, including evidence or argument stating or suggesting the every-exposure opinion. Specifically, Buffalo requests the Court to exclude the reports and testimony of Drs. Brody and Abraham with regard to whether and how any Buffalo products may have allegedly caused Mr. Huff's disease specifically, and also with regard to the every-exposure opinion generally. Should the Court determine that it wishes to receive additional evidence and argument on this matter, Buffalo requests a *Daubert* hearing to present the Court with the relevant evidence, science, and legal authorities supporting their requested relief.

NELSON MULLINS RILEY & SCARBOROUGH LLP

By: s/Robert O. Meriwether
 Robert O. Meriwether
 Federal Bar No. 01040
 E-Mail: robert.meriwether@nelsonmullins.com
 James B. Glenn
 Federal Bar No. 10366
 E-Mail: jase.glenn@nelsonmullins.com
 1320 Main Street / 17th Floor
 Post Office Box 11070 (29211-1070)
 Columbia, SC 29201
 (803) 799-2000

Attorneys for Defendant Air & Liquid Systems Corporation

Columbia, South Carolina

April 30, 2018

CERTIFICATE OF SERVICE

I hereby certify on this 30th day of April, 2018, a copy of the **Defendant Air & Liquid Systems Corporation's *Daubert* Motion to Exclude Specific Causation Opinion Testimony of Plaintiffs' Experts** was served by electronic means on parties registered with the District of South Carolina's Electronic Case Filing system. I further certify that a copy of the foregoing, together with a copy of the Notice of Electronic Filing, was served on parties who are not registered to receive a Notice of Electronic Filing for this case, by mailing of a copy of same by United States Mail, postage prepaid.

NELSON MULLINS RILEY & SCARBOROUGH, LLP

By: s/ Robert O. Meriwether

Robert O. Meriwether

Federal Bar No. 1040

Columbia, South Carolina